

## **INFORMATION ITEM**

### **Overview of Association of California Water Agencies Integrated Storage Study**

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**Summary:** A representative from the Association of California Water Agencies will provide an overview of its recently released Storage Integration Study and discuss implications for the conveyance, storage systems and the operation of both Delta Plan amendment.

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### **Background**

California's recent record-breaking rainfall and snowfall following an historic five-year drought underscores the variability of California's hydrology and the need for new approaches to operating the state's water system. In response to this need, various agencies, including the Council, are exploring new concepts to improve the resiliency<sup>1</sup> of the water supply system and achieve the coequal goals of improving ecosystem health and water supply reliability.

In July of this year, the Association of California Water Agencies (ACWA) released its Storage Integration Study. See Attachment 1 for an eight-page summary of the study, the full sixty-two page study can be found at <https://www.acwa.com/wp-content/uploads/2017/06/2017-06-05-ACWA-Integrated-Storage-Final-Report.pdf>.

The technical study examines how California's water supply system could operate more flexibly and effectively with the addition and integrated operation of new storage capacity. The first-of-its-kind study, conducted with the full participation of the storage project proponents, is intended to generate discussion about a new approach to water storage integration.

The study by MBK Engineers illustrates the benefits of adding diverse new surface and groundwater storage projects to the state's water system. Key conclusions of the study are:

- Water is available;
- System carryover storage can be enhanced significantly;
- Operational flexibility can be increased;
- More water can be put to use for the environment and water users;
- Groundwater management can be enhanced;
- Multiple benefits can be realized; and
- Resiliency is added to the system.

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<sup>1</sup> "Resilience" is defined in the California Water Plan as the capacity of a resource or natural system to adapt to and recover from changed conditions after a disturbance.

The study concludes that operating new storage projects as an integrated system with existing storage and conveyance facilities would present new opportunities to increase water available for both environmental and water supply uses. This would also minimize conflict and maximize the resiliency of our water system, and improve our ability to meet the coequal goals and replenish groundwater basins in furtherance of the Sustainable Groundwater Management Act of 2014 (SGMA).

### **Relationship to the Council's Conveyance, Storage and Operations Amendment**

The Council is in the process of amending the Delta Plan to promote options for water conveyance<sup>2</sup>, storage systems, and the operation of both as required by Water Code Section 85304. The draft Delta Plan Amendment for Conveyance, Storage Systems, and the Operation of Both (Delta Plan CSO amendment), intends to influence and integrate conveyance and storage projects, and their operations, in a way that helps further the coequal goals.

The draft Delta Plan CSO amendment describes the types and characteristics of infrastructure that could contribute to the coequal goals, and also identifies recommended criteria for project proponents to use in evaluating and developing new conveyance and storage projects. In general, the CSO amendment recommends a suite of actions, including coordinated operations of existing and new water conveyance and storage facilities that could potentially increase water supply for the State's coequal goals; improve water supply reliability and operational flexibility through improved groundwater management; and increase water system resiliency for Delta and Delta watershed environmental benefits.

Independently, and consistent with recommendations of the draft Delta Plan CSO amendment, the ACWA Storage Integration Study by MBK Engineers modeled real-world capabilities of proposed storage projects. The findings suggest that adding storage assets to the system and operating them in an integrated way would result in significant value, including new water available to meet the State's coequal goals, protection of existing water supplies and a more resilient water system for both the environment and water users.

At the June 2017 Council meeting, the Council endorsed the draft Delta Plan CSO amendment for purposes of conducting environmental review. Over the coming months, Council staff will use information from various studies, including the ACWA Storage Integration Study, to evaluate the environmental impacts of the proposed Delta Plan CSO amendment recommendations.

### **Today's Panel**

The purpose of today's presentation is to brief the Council on the June 2017 Storage Integration Study and its findings and conclusions regarding the potential to integrate new and existing water storage projects in the State.

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<sup>2</sup> "Conveyance" is defined in the Delta Plan as the movement of water from one place to another. Conveyance infrastructure includes natural watercourses as well as canals, pipelines, and control structures including weirs. See Glossary, Delta Plan, Delta Stewardship Council, 2013, as amended.

David Bolland, director of State regulatory relations for ACWA, will present a summary on the June 2017 Storage Integration Study and its findings and conclusions.

The Council may wish to consider the following questions during this presentation:

- How can potential Delta conveyance improvements enhance the integration of new and existing storage projects? Does the June 2017 Storage Integration Study support the concept of “Big gulp, little sip”?
- How could the June 2017 Storage Integration Study assist decision makers to evaluate and prioritize storage projects?

### **Fiscal Information**

Not applicable.

### **List of Attachments**

Attachment 1: 21<sup>st</sup> Century Water Infrastructure: New Approaches to Create Flexibility and Resiliency, July 2017, by the Association of California Water Agencies

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